



IN THE CLAIMS

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Please cancel claims 1, 6, 8, 11-13, 18 and 23-28.

Please amend the claims as follows:

1-3. (canceled)

4. (currently amended) A method for determining a desired position of a pseudolite at a site at a specified point in time, including the steps of:
dividing the site into at least two areas of coverage including a first coverage area and a second coverage area;
determining if the first coverage area is covered by at least one GPS satellite at the specified point in time;
determining if the second coverage area is covered by at least one GPS satellite at the specified point in time;
predicting an area of coverage of the site by at least one GPS satellite as a function of the determination of coverage of the first and second coverage areas at the specified point in time;
determining a condition of reduced coverage as a function of the predicted area of coverage at the specified point in time;
displaying the area having reduced coverage at the specified point in time on a terrain map;
placing a pseudolite at a location at the site to provide coverage in the area having reduced coverage at the specified point in time; and
~~A method, as set forth in claim 1, further including the step of displaying an area of coverage of the pseudolite on the terrain map at the specified point in time.~~

5. (previously amended) A method, as set forth in claim 4, further including the step of moving the pseudolite to a new location in response to the area of coverage of the pseudolite not covering the area having reduced coverage at the specified point in time.

6-8. (canceled)

9. (currently amended) A method for determining a desired position of a pseudolite at a site at a specified point in time, including the steps of:

dividing the site into at least two areas of coverage including a first coverage area and a second coverage area;

determining if the first coverage area is covered by at least one of a plurality of GPS satellites at the specified point in time;

determining if the second coverage area is covered by at least one of the at least one of a plurality of GPS satellites and another one of a plurality of GPS satellites at the specified point in time;

predicting an area of coverage of the site by the plurality of GPS satellites as a function of the determination of coverage of the first and second coverage areas at the specified point in time;

determining a condition of reduced coverage as a function of the predicted area of coverage at the specified point in time;

displaying the area having reduced coverage at the specified point in time on a terrain map;

placing a pseudolite at a location at the site to provide coverage in the area having reduced coverage at the specified point in time;

A method, as set forth in claim 8, further including the steps of:

moving the pseudolite model to a second location on the terrain map;

displaying a revised area of coverage of the pseudolite model on the terrain map; and

displaying a revised change in coverage of the area having reduced coverage as a function of the revised area of coverage of the pseudolite model.

10. (original) A method, as set forth in claim 9, further including the step of placing a pseudolite at a location at the site corresponding to a desired location of the pseudolite model.

11 - 13. (canceled)

14. (currently amended) An apparatus for determining a desired position of a pseudolite at a site, at a specified point in time, comprising:

at least one mobile machine located at the site;

a GPS receiver located on the mobile machine for receiving signals from a plurality of GPS satellites;

a display for indicating a terrain map of the site;

~~An apparatus, as set forth in claim 13, further including~~ input means for inputting a desired location on the terrain map for a pseudolite model; and

a processor for:

dividing the site into at least two areas of coverage including a first coverage area and a second coverage area;

determining if the first coverage area is covered by the plurality of GPS satellites at the specified point in time;

determining if the second coverage area is covered by the plurality of GPS satellites at the specified point in time;

predicting a future area of coverage of the site by the plurality of GPS satellites as a function of the determination of coverage of the first and second coverage areas at the specified point in time;

determining a condition of predicted reduced coverage in at least one area of the site at the specified point in time; and

providing information to the display to indicate the at least one area having reduced coverage at a specified point in time, the area having reduced coverage being indicative of a desired position of a pseudolite at the site.

15. (original) An apparatus, as set forth in claim 14, wherein the processor is further adapted to receive the desired location for the pseudolite model, provide the desired location to the display to indicate the pseudolite model at the desired location, and provide information to the display to indicate an area of coverage of the pseudolite model.

16. (original) An apparatus, as set forth in claim 15, wherein the processor is further adapted to provide information to the display to indicate a change in coverage of the area having reduced coverage as a function of the area of coverage of the pseudolite model.

17. (currently amended) An apparatus for determining a desired position of a pseudolite at a site, at a specified point in time, comprising:

at least one mobile machine located at the site;
a GPS receiver located on the mobile machine for receiving signals from a plurality of GPS satellites;
a display for indicating a terrain map of the site; and
a processor for:
dividing the site into at least two areas of coverage including a first coverage area and a second coverage area;
determining if the first coverage area is covered by the plurality of GPS satellites at the specified point in time;
determining if the second coverage area is covered by the plurality of GPS satellites at the specified point in time;
predicting an area of coverage of the site by the plurality of GPS satellites as a function of the determination of coverage of the first and second coverage areas at the specified point in time;
determining a condition of predicted reduced coverage in at least one area of the site at the specified point in time;
providing information to the display to indicate the at least one area having reduced coverage at a specified point in time, the area having reduced coverage being indicative of a desired position of a pseudolite at the site;

determining an optimal location of at least one pseudolite model as a function of the at least one area having reduced coverage; and

providing information to the display to indicate the at least one pseudolite model at the optimal location, and to update the terrain map to indicate revised coverage in the at least one area as a function of the coverage of the plurality of GPS satellites and the at least one pseudolite model.

~~An apparatus, as set forth in claim 13, wherein the processor is further adapted to determine an optimal location of at least one pseudolite model as a function of the at least one area having reduced coverage, providing information to the display to indicate the at least one pseudolite model at the optimal location, and provide information to the display to update the terrain map to indicate revised coverage in the at least one area as a function of the coverage of the plurality of GPS satellites and the at least one pseudolite model.~~

18. (canceled)

19. (currently amended) An apparatus for determining a desired position of a pseudolite at a site, at a specified point in time, comprising:

a remote site;

a display located at the remote for indicating a terrain map of the site;

input means at the remote site for inputting a desired location on the terrain map for a pseudolite model;

means for delivering the provided information from the remote site to the site;
and

a processor located at the remote site for:

dividing the site into at least two areas of coverage including a first coverage area and a second coverage area;

determining if the first coverage area is covered by the plurality of GPS satellites at the specified point in time;

determining if the second coverage area is covered by the plurality of GPS satellites at the specified point in time;

predicting an area of coverage of the site by the plurality of GPS satellites as a function of the determination of coverage of the first and second coverage areas at the specified point in time;

determining a condition of predicted reduced coverage in at least one area of the site at the specified point in time; and

providing information to the display to indicate the at least one area having reduced coverage at a specified point in time, the area having reduced coverage being indicative of a desired position of a pseudolite at the site.

An apparatus, as set forth in claim 18, further including input means at the remote site for inputting a desired location on the terrain map for a pseudolite model.

20. (original) An apparatus, as set forth in claim 19, wherein the processor is further adapted to receive the desired location for the pseudolite model, provide the desired location to the display to indicate the pseudolite model at the desired location, and provide information to the display to indicate an area of coverage of the pseudolite model.

21. (original) An apparatus, as set forth in claim 20, wherein the processor is further adapted to provide information to the display to indicate a change in coverage of the area having reduced coverage as a function of the area of coverage of the pseudolite model.

22. (currently amended) An apparatus for determining a desired position of a pseudolite at a site, at a specified point in time, comprising:

a remote site;

a display located at the remote for indicating a terrain map of the site;

means for delivering the provided information from the remote site to the site;

and

a processor located at the remote site for:

dividing the site into at least two areas of coverage including a first coverage area and a second coverage area;

determining if the first coverage area is covered by the plurality of GPS satellites at the specified point in time;
determining if the second coverage area is covered by the plurality of GPS satellites at the specified point in time;
predicting a future an area of coverage of the site by the plurality of GPS satellites as a function of the determination of coverage of the first and second coverage areas at the specified point in time;
determining a condition of predicted reduced coverage in at least one area of the site at the specified point in time; and
providing information to the display to indicate the at least one area having reduced coverage at a specified point in time, the area having reduced coverage being indicative of a desired position of a pseudolite at the site;

~~An apparatus, as set forth in claim 18,~~ wherein the processor is further adapted to determine an optimal location of at least one pseudolite model as a function of the at least one area having reduced coverage, providing information to the display to indicate the at least one pseudolite model at the optimal location, and provide information to the display to update the terrain map to indicate revised coverage in the at least one area as a function of the coverage of the plurality of GPS satellites and the at least one pseudolite model.